



## SERVICE BULLETIN

ENGINE - HP COMPRESSOR REAR OUTER CASE - REMOVAL OF OVERSPRAY FROM THE SEAL LAND  
CHAMBERS - CATEGORY CODE 6 - MOD.ENG-72-0177

1. Planning InformationA. Effectivity

- (1) Aircraft McDonnell Douglas
- (2) Engine
  - (a) V2525-D5 Engines prior to Serial No.V20007
  - (b) V2528-D5 Engines prior to Serial No.V20007

B. Concurrent Requirements

None.

C. Reason

## (1) Condition

Early deterioration of the stage 10 seal-ring of the HP compressor can occur. This can result in the flow of stage 10 air in to the stage 7 air. This can, in extreme conditions cause aerodynamic instability and early deterioration of the compressor.

The condition is caused by overspray on the seal land chambers of the stage 10 air seal ring. This overspray can cause the rivets that safety the seal ring to be over stressed during engine assembly.

## (2) Background

The condition has been found by operators on in-service engines.

## (3) Objective

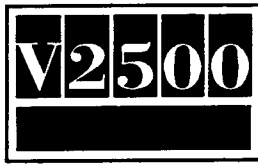
The purpose of this Service Bulletin is to maintain reliability.

## (4) Substantiation

A satisfactory engineering analysis has been done on the changes contained in this service bulletin.

## (5) Effect of Bulletin on:

V2500-ENG-72-0177



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Removal/Installation	Affected
Disassembly/Assembly	Affected
Cleaning	Affected
Inspection/Check	Affected
Repair	Affected
Testing	Affected

## (6) Supplemental Information

None.

D. Description

## (1) The changes introduced are:

- (a) A different rear outer-case assembly of the HP compressor is introduced. It is almost the same as the initial item except for the removal of all overspray from the seal land chamfers.
- (b) The case is heated to 90 deg C for 15 minutes before installation, to decrease the interference between the seal and the seal land during engine assembly.

E. Approval

The part number changes and/or part modification are given in Section 2 and 3 of this Service Bulletin. They obey the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine models listed.

F. Compliance

Category Code 6

This Service Bulletin can be done when the subassembly (That is modules, accessories, components or build groups) is disassembled sufficiently to get access to the affected parts.

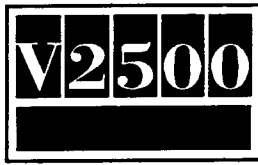
G. Manpower

Estimate of man-hours necessary to do this Service Bulletin in full:

Venue	Estimated Man-hours
(1) In service .. ..	Not affected
(2) At overhaul .. ..	No more time is necessary to do this service bulletin

NOTE: It is possible to get access to the affected parts during overhaul.

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#### H. Material - Price and Availability

(1) A modification kit is not necessary.

(2) See 'Material Information' section for prices and availability of spares.

#### I. Tooling - Price and Availability

Special tools are not necessary.

#### J. Weight and Balance

(1) Weight change .. .. None

(2) Moment arm .. .. No effect

(3) Datum .. .. Engine front mount centreline  
(Power Plant Station - PPS 100)

#### K. Electrical Load Data

This Service Bulletin has no effect on the aircraft electrical load.

#### L. References

(1) Internal Reference No.

EC92VR329

#### M. Other Publications Affected

(1) Illustrated parts catalog (IPC), Chapter/Section 30-21-49, 72-41-00 and 72-41-23.



2. Accomplishment Instructions

A. Rework instructions

None.

B. Assembly instructions

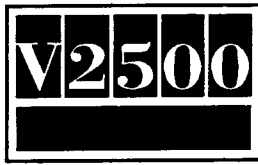
TBA

C. Recording instructions

(1) A record of accomplishment is necessary.

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## SERVICE BULLETIN

3. Material Information

Applicability: For each V2500 Engine to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None

B. Parts affected by this Bulletin:

New Part No. (ATA No.)	Qty	Est'd Unit Price (\$)	Keyword	Old Part No. (IPC No.)	Instructions Disposition
6A5497 (72-41-23)	1		Case assy, rear outer - HP compressor	6A4407 (02-400)	(A)(B)(S1)
NND5135 (72-41-23)	Ref		Case, rear outer - HP	NND3990 (02-550)	(C)(D)

NOTE: The 1997 unit prices are an estimate and they are given for the purpose of planning only. For information about actual prices, refer to the IAE Price Catalog or contact IAE's Spare Parts Sales Department.

C. Instructions disposition codes:

- (A) New parts are currently available.
- (B) Old parts will no longer be available.
- (C) Part is not a replenishment spare. For reference only.
- (D) Part of case assembly at ATA chapter 72-41-23 figure item 02-400.
- (S1) Old and new parts are not interchangeable.

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